Amendments to the Drawings:

The attached sheet of drawings includes changes to Figure 4. This sheet, which includes Fig. 4, replaces the original sheet including Fig. 4.

Attachment: Replacement Sheets

REMARKS

Claims 1, 3, 4, 6-10, and 12-18 are presented for further examination. Claims 1, 3, 7, 13, and 14 have been amended. Claims 2, 5, 11, and 19 have been canceled.

In the Office Action mailed August 29, 2006, the Examiner rejected claims 1, 7, 12, and 14-18 under 35 U.S.C. § 103(a) as unpatentable over U.S. Patent Application Publication No. 2006/0082445 ("O'Toole et al.") in view of U.S. Patent Application Publication No. 2006/0145855 ("Diorio et al."). Claims 2, 3, 6, 8, and 9 were rejected as obvious over O'Toole et al. in view of Diorio et al. and further in view of U.S. Patent Application Publication No. 2002/0039885 ("Weissman et al."). Claims 4, 5, 10, 11, and 19 were rejected as obvious over O'Toole et al. in view of Diorio et al. and further in view of U.S. Patent No. 6,720,866 ("Sorrells et al."). Claim 13 was rejected as obvious over O'Toole et al. in view of Sorrells et al. and further in view of Diorio et al.

Applicants respectfully disagree with the bases for the rejections and request reconsideration and further examination of the claims.

Figure 4 has been amended to correct an error in the reference number and a corresponding change has been made to the specification. No new matter has been added. Approval and entry of accompanying substitute Figure 4 is requested.

As the Examiner recognizes, O'Toole et al. is not a passive device. In fact, O'Toole et al. specifically teaches that their object and purpose is to increase the transmission power and hence the transmission range of the device through the use of active transponder design techniques (*see* Abstract). O'Toole et al. is not designed to and does not teach or suggest extracting power from a received radio frequency signal for powering a microprocessor and other circuitry in the transponder. O'Toole et al. does not teach or suggest using the extracted power in a manner that is stored in a storage device in the transponder for later use. In addition, O'Toole et al. do not teach or suggest using the power extracted from the received radio frequency signals to power external devices.

Diorio et al. does describe passive tags utilizing and extracting operating energy from a received radio frequency signal. However, Diorio et al. do not teach or suggest storing the same in a storage device in the transponder. Diorio et al. also do not teach or suggest

extracting power from received radio frequency signals to be used to power the transponder, for storage, and for use in powering external devices.

The Weissman et al. reference describes a split repeater for conveying a radio-frequency signal in which a two-way master port and two-way slave port are used to receive and transmit radio frequency signals. However, Weissman et al. fails to teach or suggest adaptation and use of such a port in a passive radio frequency transponder, the description in Diorio et al. fails to teach or suggest how this would be accomplished.

The Sorrells et al. reference is relied upon for utilizing digital inputs on an input pin for being coupled to a plurality of digital inputs on an external device. At column 2, lines 35-49, Sorrells et al. describe adapting an RFID tag for use with digital inputs and for interfacing with an analog-to-digital converter. Sorrells et al. also describe a different embodiment in which analog input is converted to digital values. However, Sorrells et al. do not teach or suggest inputs and outputs that can handle both analog and digital.

Turning to the claims, claim 1 is directed to an RFID device for use with external devices in which an antenna circuit is configured to receive and return radio frequency signals, a modulation circuit is coupled to the antenna circuit and configured to generate the modulator radio frequency signals in response to the received radio frequency signals, and a low-power CMOS microprocessor is coupled to the antenna and configured to receive operating power from the received radio-frequency signals and to output power from the received signals to the external devices. Claim 1 further recites the microprocessor generating responsive signals to the modulation circuit for modulating the radio frequency signals in response to an input signal received on at least one input pin that comprises an input-and-output pin and in which the microprocessor is adapted to process both analog and digital signals.

As discussed above, nowhere do O'Toole et al. or Diorio et al., taken alone or in any combination thereof, teach or suggest a passive radio frequency identification transponder device in which the operating power is extracted from the radio frequency signals and is also used to power external devices. For this reason as well as for the reasons discussed above, applicants respectfully submit that claim 1 is clearly allowable.

Dependent claims 3, 4, and 6 are allowable for the features recited therein as well as for the reasons why claim 1 is allowable.

Independent claim 7 is directed to a radio-frequency identification system for use with external devices having an interrogation device operating in the range of 2400 MHz to 2500 MHz and a transponder having an antenna circuit, a modulation circuit, and a low-power CMOS microprocessor that extracts operating power from the received radio frequency signals and outputs power from the received radio frequency signals to external devices, and the microprocessor is adapted to *inter alia* process analog and digital signals. Applicants respectfully submit that claim 7 is allowable for the reasons discussed above with respect to claim 1. For example, nowhere do O'Toole et al. and Diorio et al., taken alone or in any combination thereof with the other references cited by the Examiner, teach or suggest outputting power extracted from received radio frequency signals to external devices.

Dependent claims 8-10 and 12 are allowable for the features recited therein as well as for the reasons why claim 7 is allowable.

Independent claim 13 is also directed to a radio frequency transponder device for use with external devices that includes means for receiving radio frequency signals and reflecting modulated radio frequency signals, means for generating the modulated radio frequency signals, and, *inter alia*, means for processing at least one input signal and receiving operating power therefrom to generate control signals to the modulation means and to provide power to the external devices that is extracted from the received signals. Applicants respectfully submit that claim 13 and all claims depending therefrom, *i.e.*, claims 15-18, are allowable for the reasons discussed above with respect to claims 1 and 7 and their corresponding dependent claims.

In view of the foregoing, applicants submit that all of the claims in this application are now in condition for allowance. Consequently, early and favorable action allowing these claims is respectfully requested. In the event the Examiner finds minor informalities that can be resolved by telephone conference, the Examiner is urged to contact applicants' undersigned representative by telephone at (206) 622-4900 in order to expeditiously resolve prosecution of this application.

The Director is authorized to charge any additional fees due by way of this Amendment, or credit any overpayment, to our Deposit Account No. 19-1090.

Respectfully submitted,

SEED Intellectual Property Law Group PLLC

/ E. Russell Tarleton /
E. Russell Tarleton
Registration No. 31,800

ERT:alb

Enclosure:
1 Sheet of Replacement Drawings (Figure 4)

701 Fifth Avenue, Suite 5400
Seattle, Washington 98104
Phone: (206) 622-4900
Fax: (206) 682-6031

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